



National Weather Service, Jacksonville, Florida

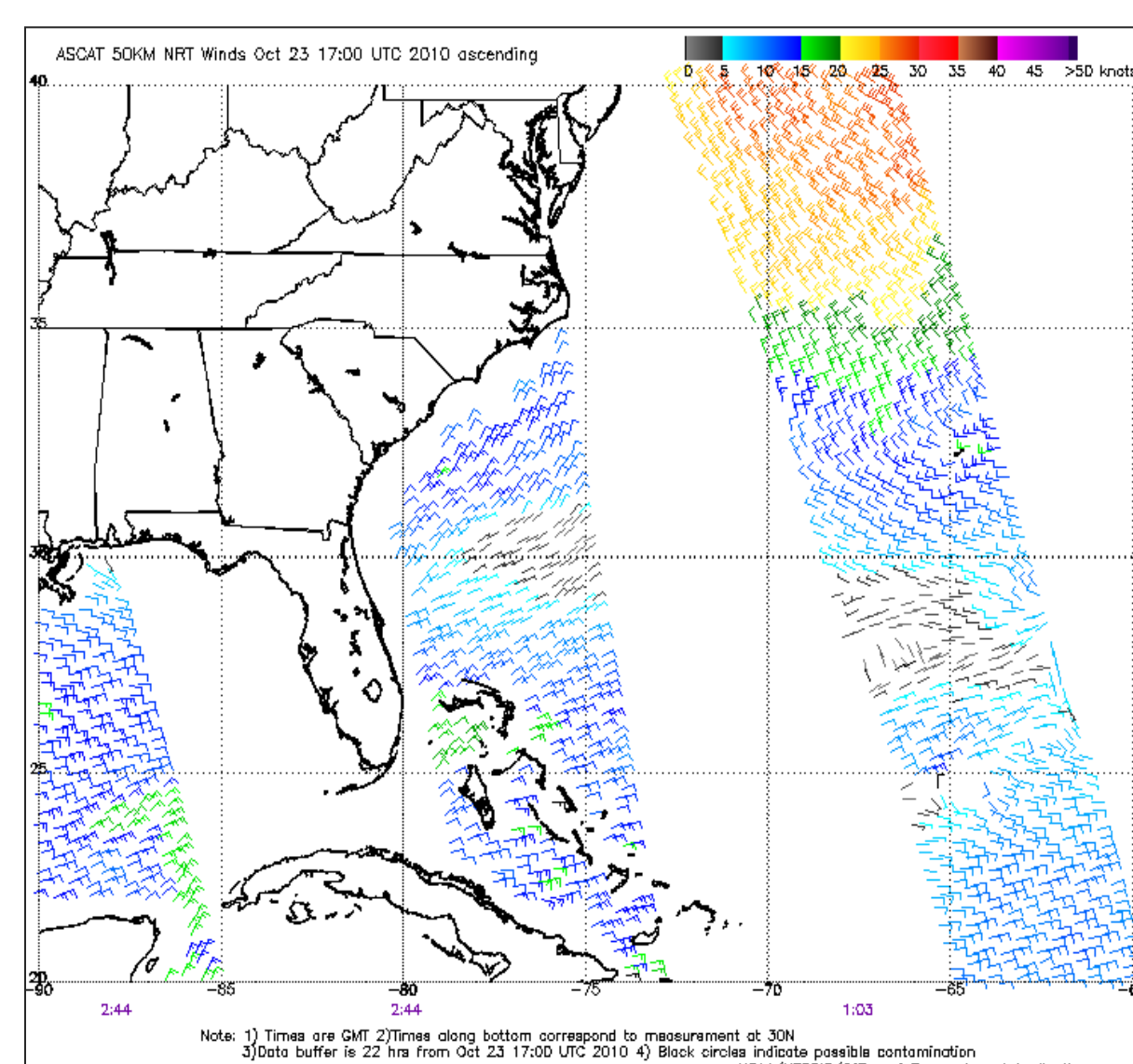
The National Weather Service Coastal and Marine Forecast Program



Observation Tools

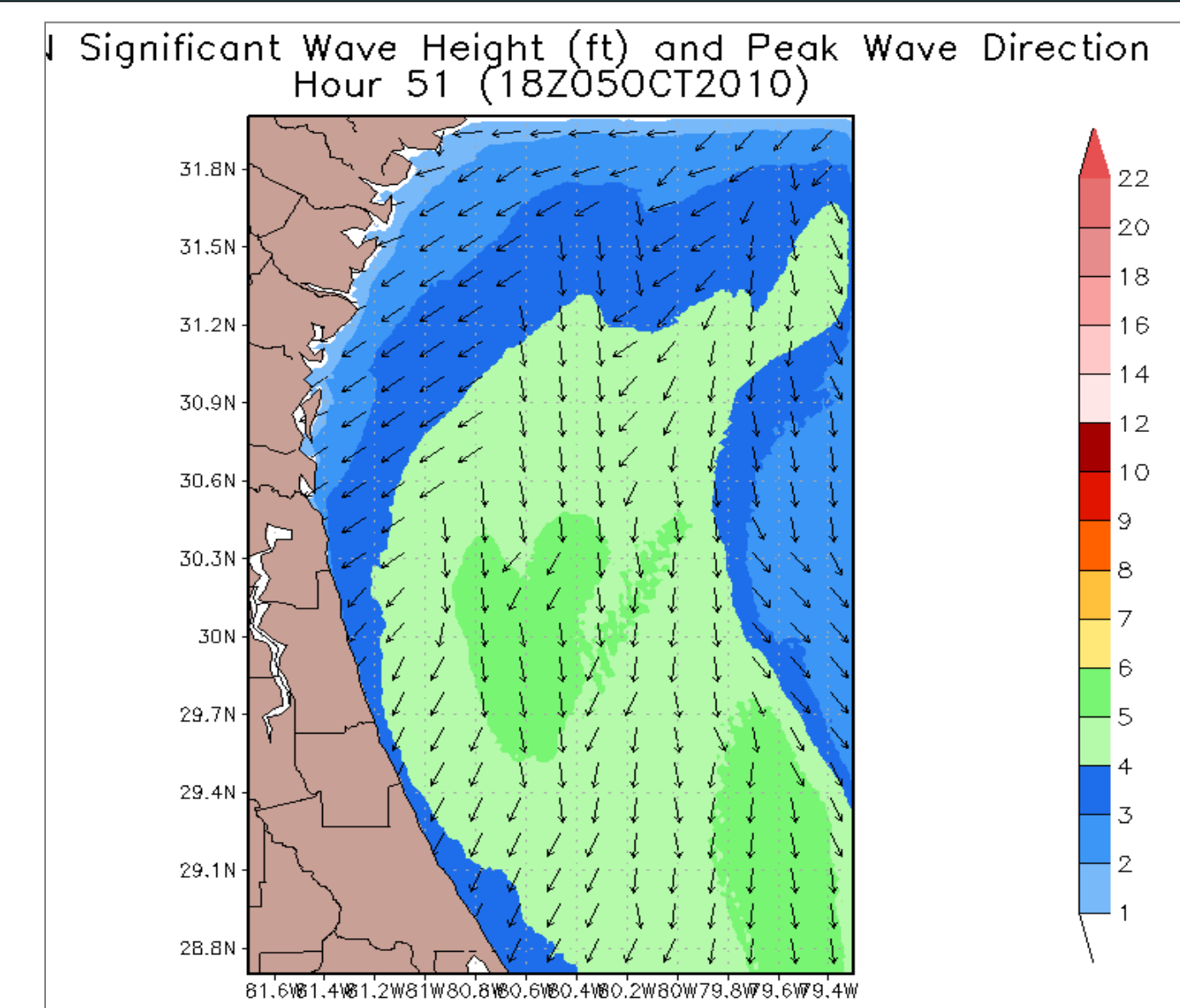


A large number of ships and buoys collect and transmit ocean and weather observations.



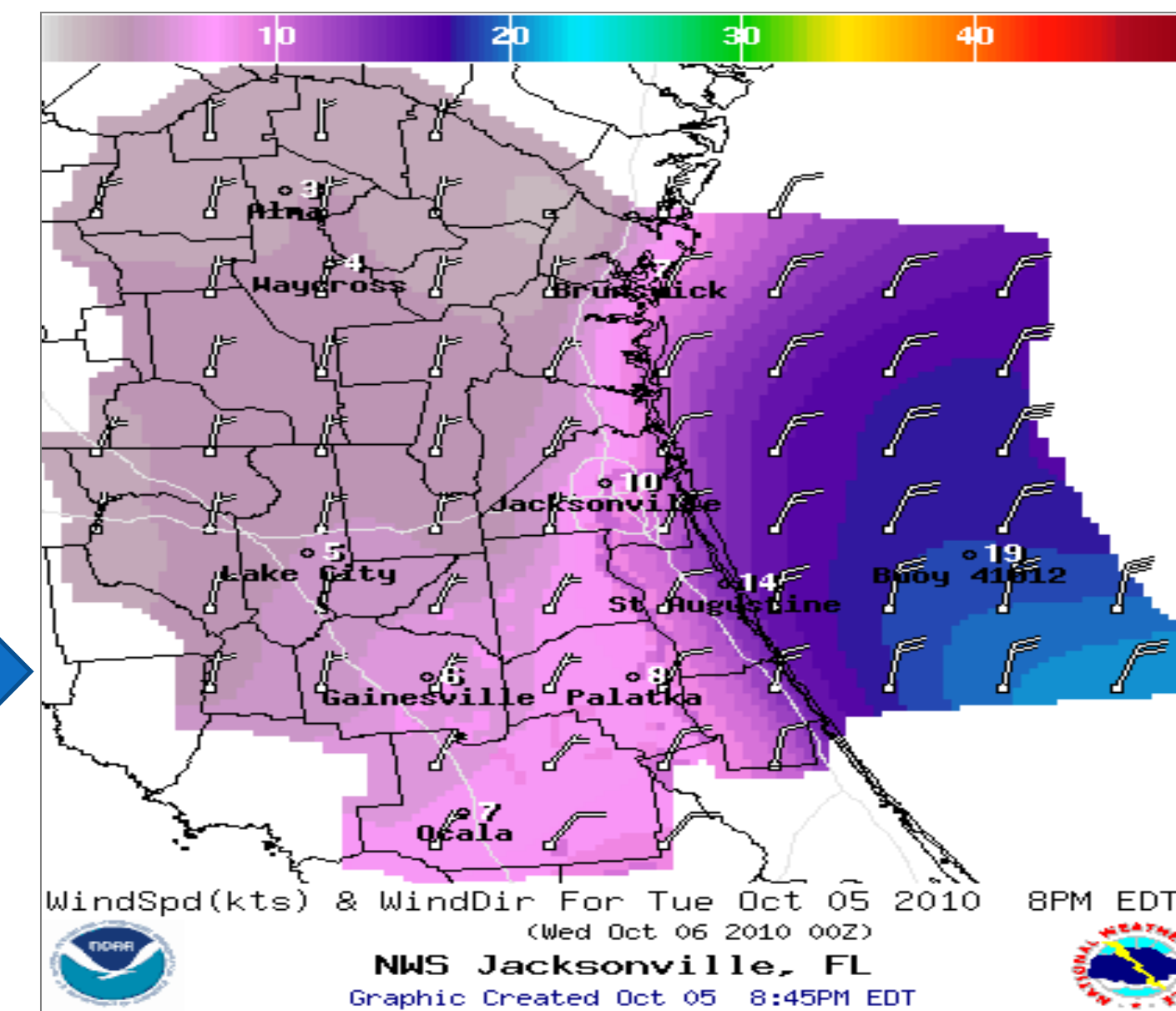
The latest satellites provide good coverage of wind data across the oceans.

New Computer Models

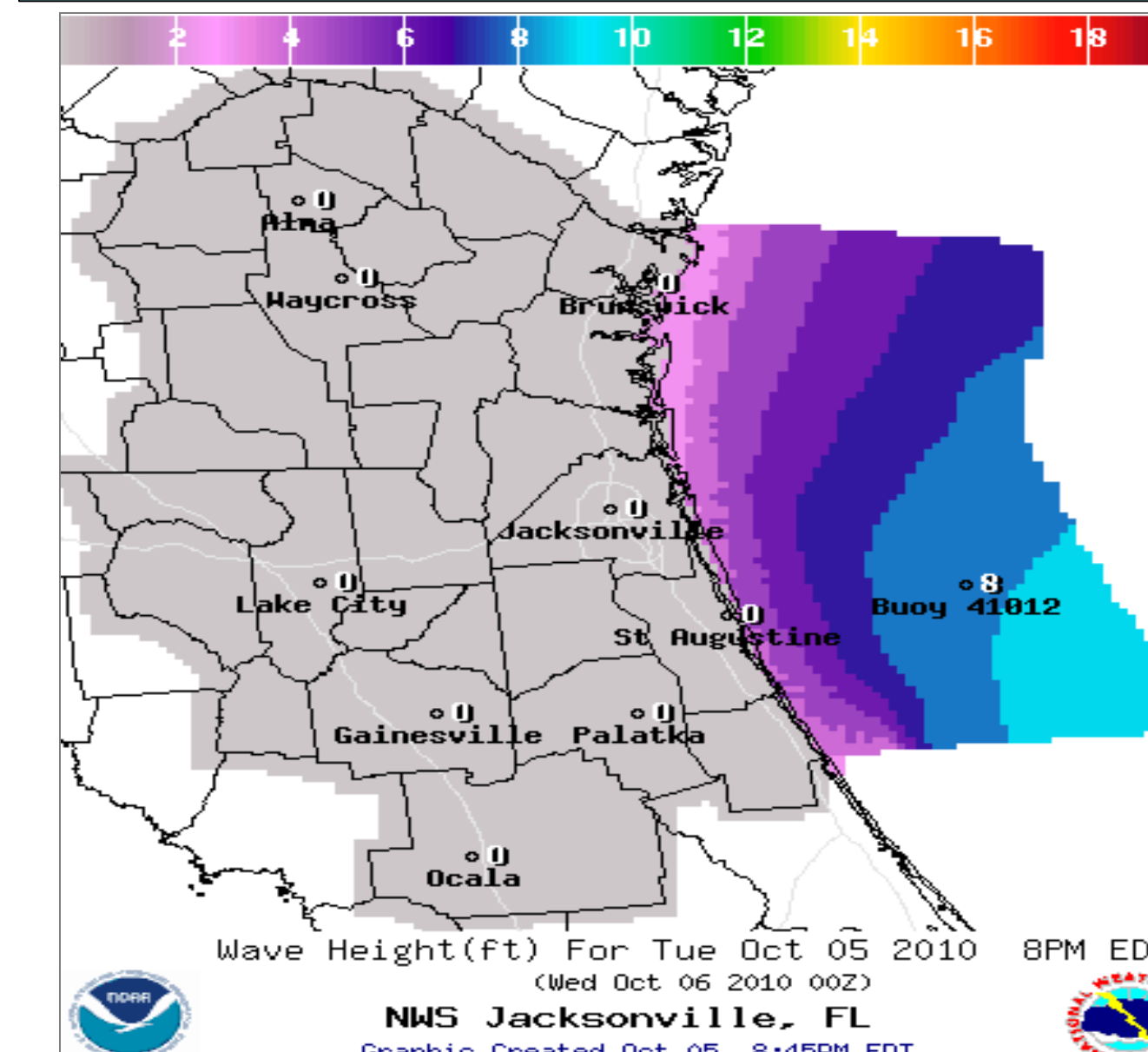


High-resolution computer models produce forecasts of winds and seas across the marine waters.

Coastal Marine Forecasts

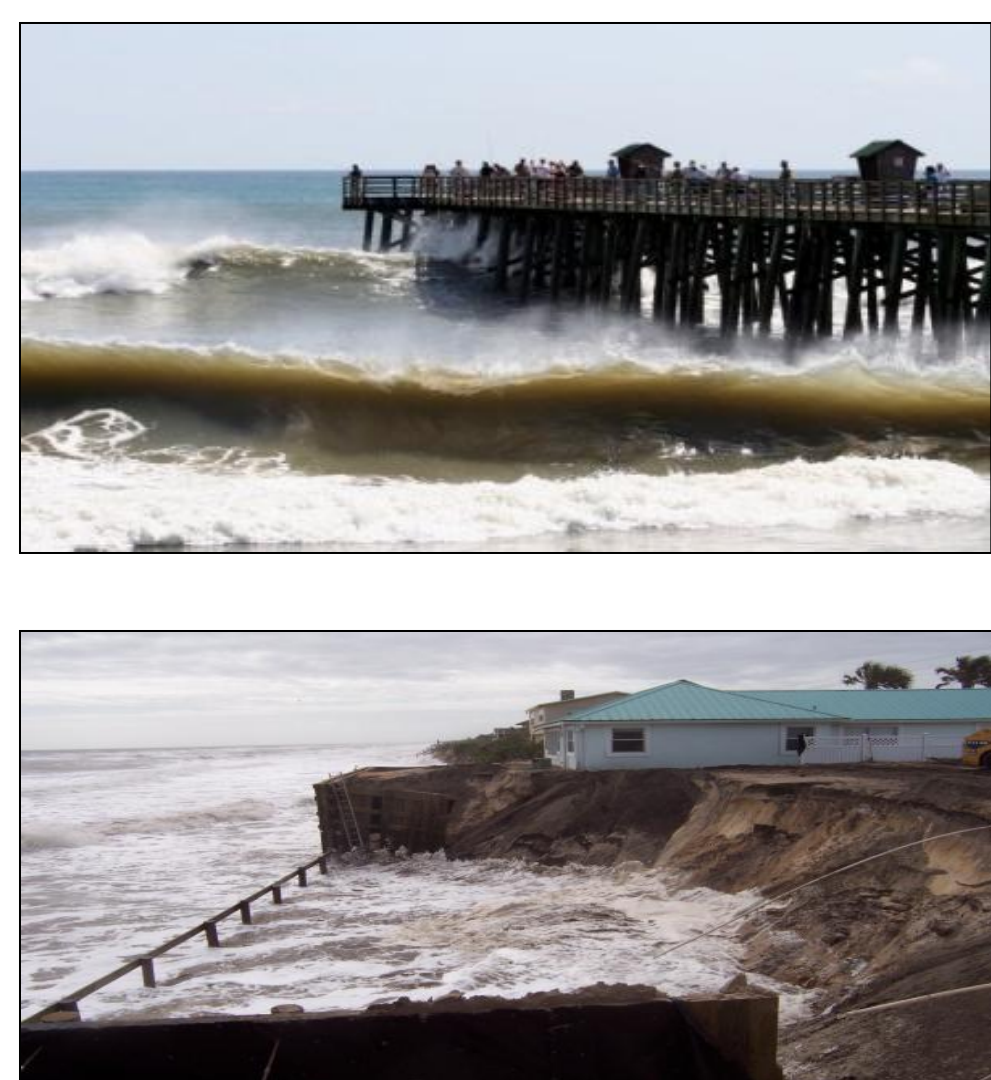


The model guidance is the basis for the design of graphical marine forecast grids of winds (left) and seas (right). From the forecast grids, the text marine forecast is generated, and broadcast on NOAA Weather Radio.



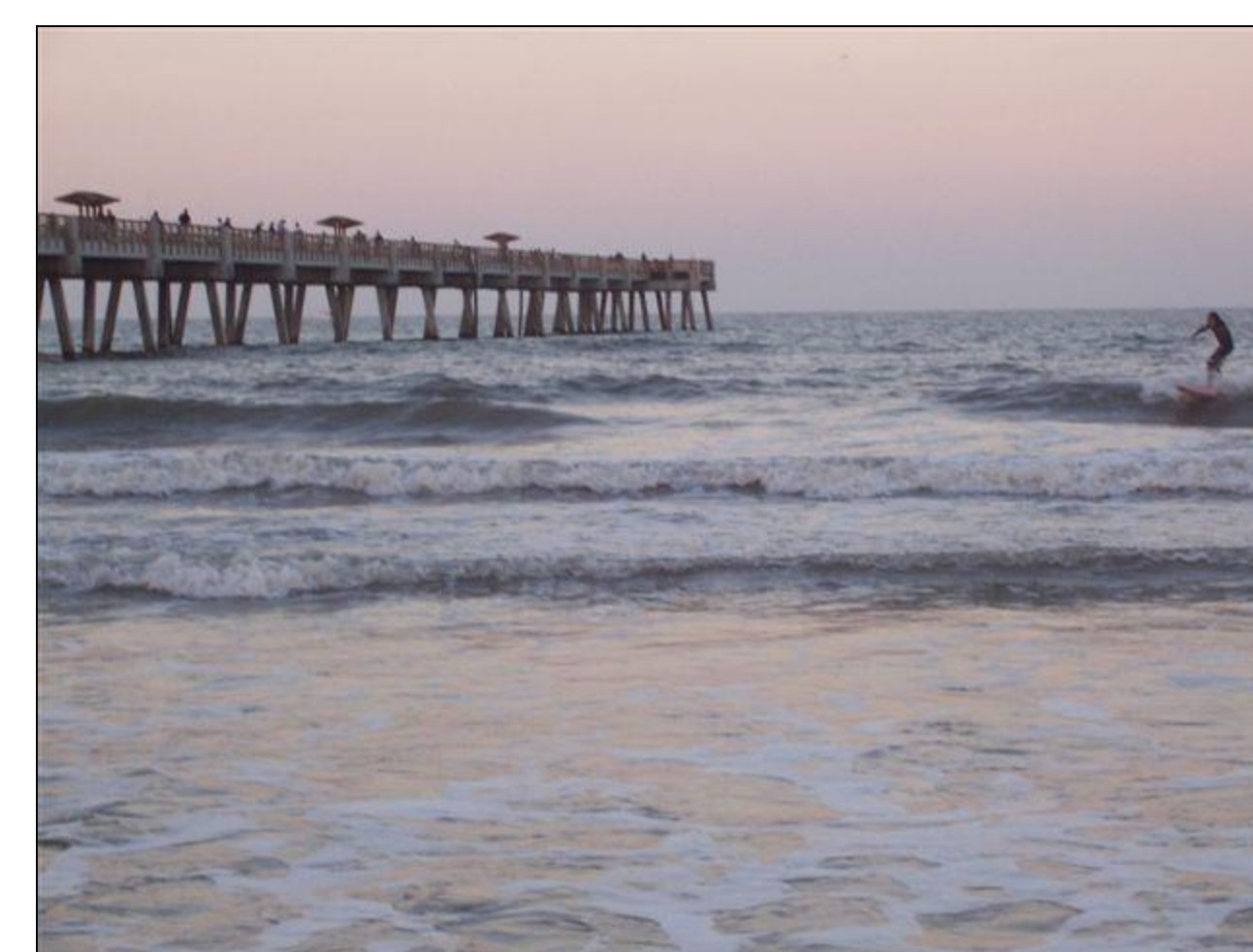
.Tonight...Northeast winds 10 to 15 knots. Seas 2 to 4 feet. Inland waters a light chop.
.Tuesday...Northeast winds 15 knots. Seas 3 to 5 feet. Inland waters a moderate chop.

Coastal Flooding /Beach Erosion



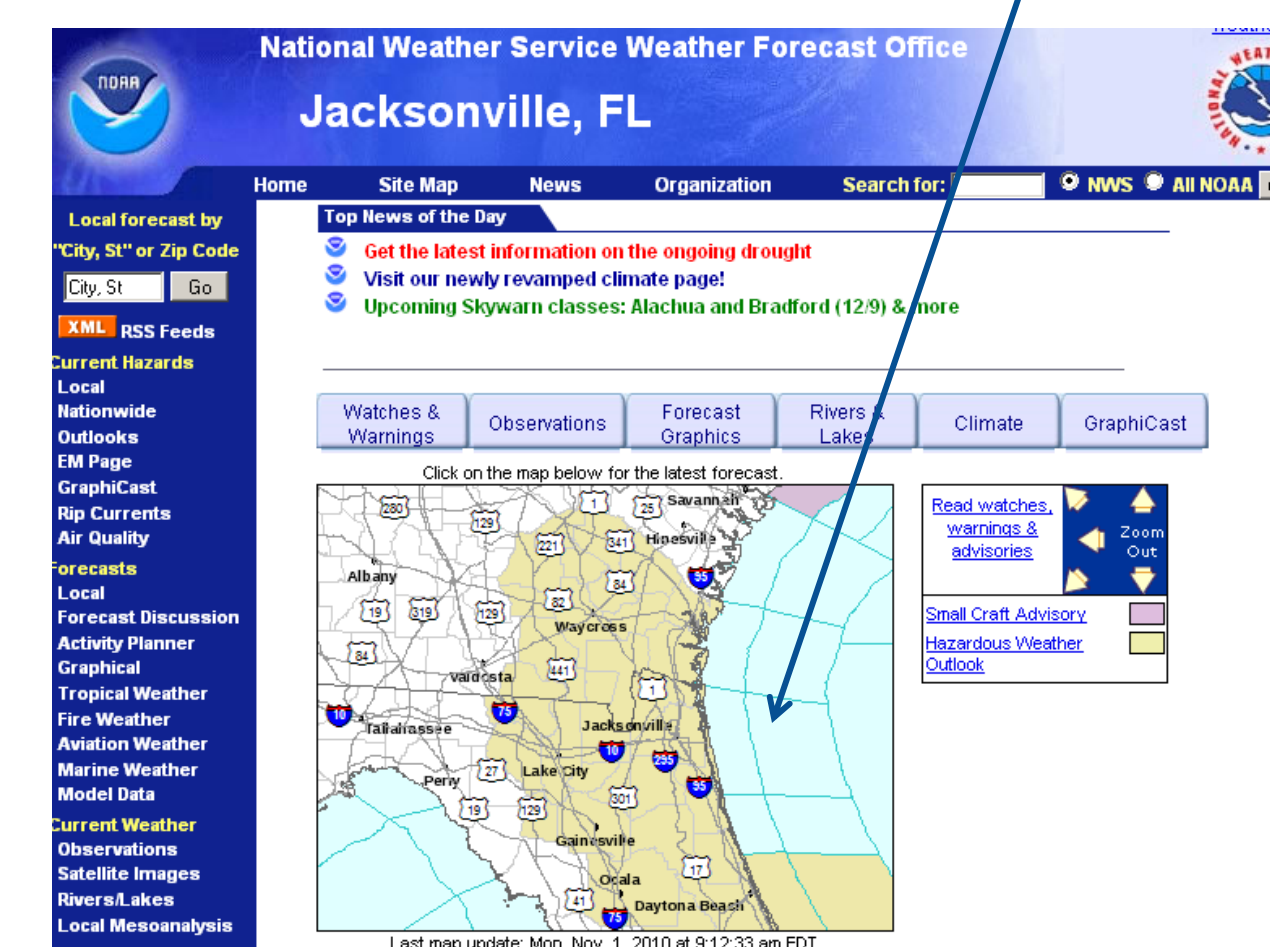
The NWS issues statements and advisories to cover high surf, beach erosion, and abnormally high tides.

Surf Zone Forecasts



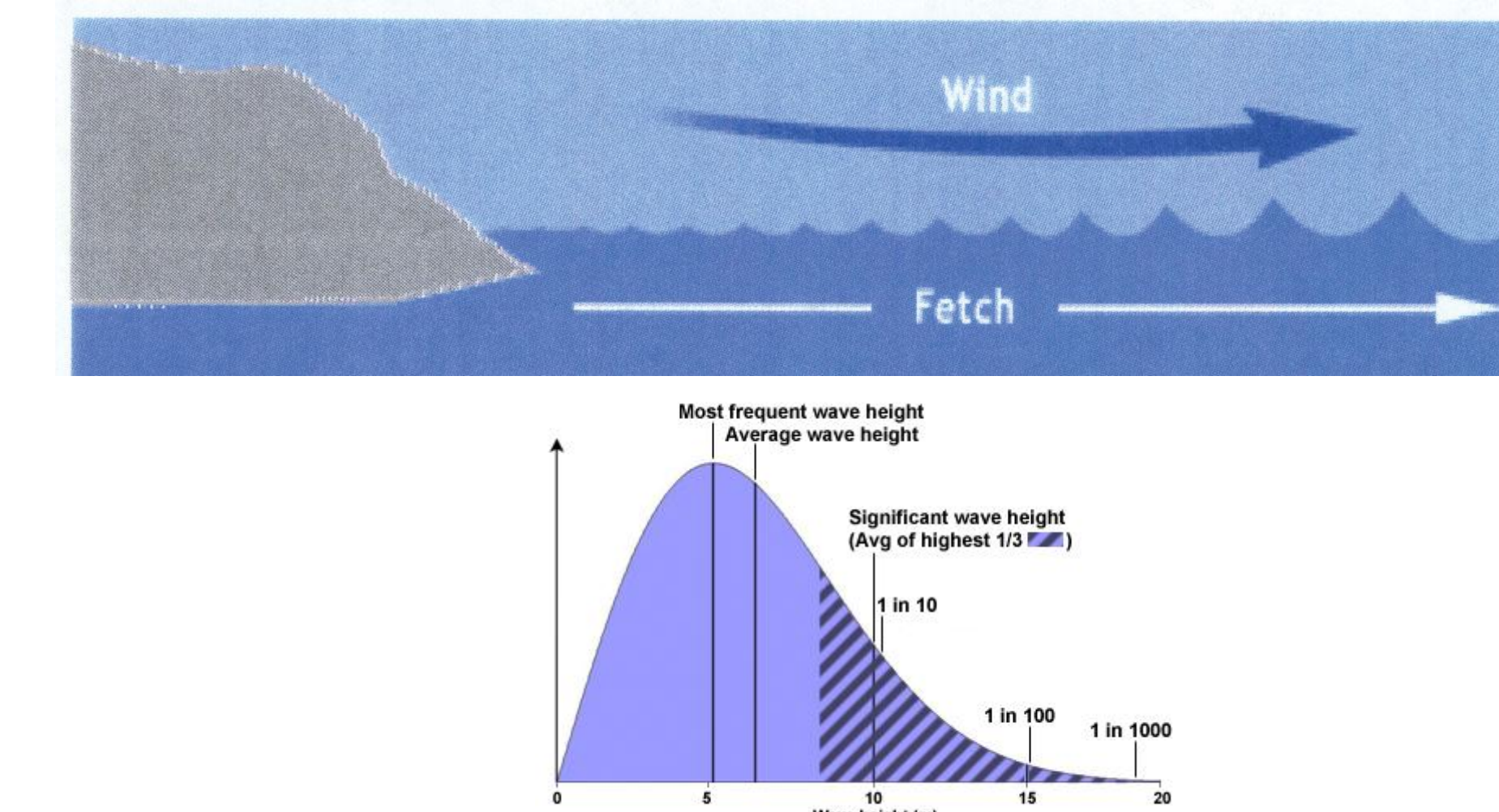
The NWS issues "surf zone forecasts" to provide information on expected conditions along the immediate coastline, including the threat for Rip Currents.

Click here for specific coastal marine forecast



The NWS Jacksonville website allows you to click on any location to display the forecast at that point, including marine areas.

What is meant by "Seas"?



In marine forecasts, seas refer to a range of expected "significant wave heights"...defined as the height of the tallest 1/3 of expected waves. Wave heights are influenced by the strength and duration of the surface wind, and the distance (fetch) covered by the wind.

Marine Advisories and Warnings

TYPE OF WARNING	DAYTIME SIGNALS	NIGHTTIME SIGNALS	WIND SPEED (KNOTS)	WIND SPEED (MPH)
SMALL CRAFT ADVISORY			UP TO 33	UP TO 38
GALE WARNING			34-47	39-54
STORM WARNING			48-63	55-73
HURRICANE			64 OR GREATER	74 OR GREATER

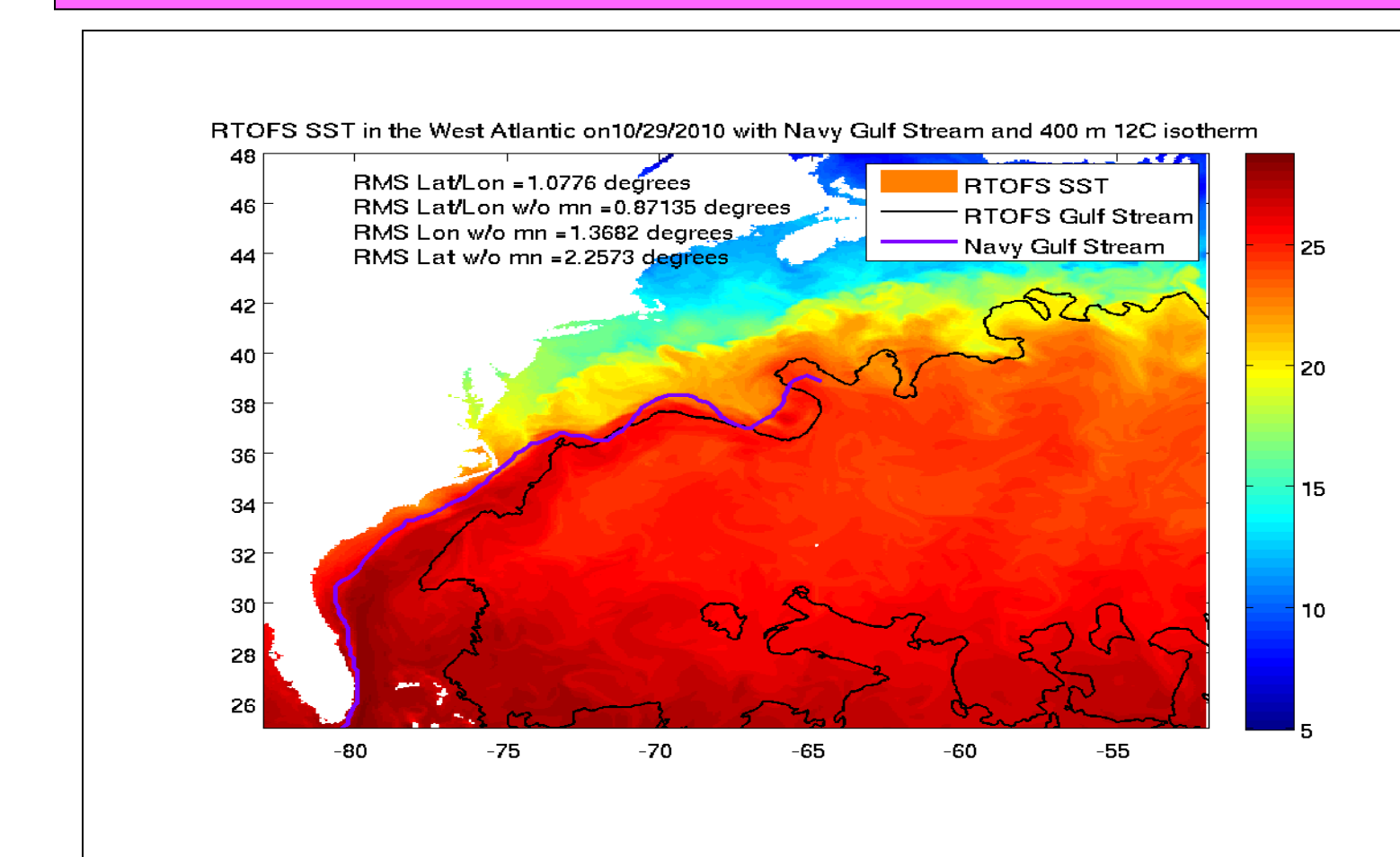
The NWS issues several different types of marine advisories or warnings, primarily based on expected wind speeds. Note: Approximately 15% of boating accidents in 2009 were attributed to the environment, according to the U.S. Coast Guard.

Special Marine Warnings and Statements



Thunderstorms winds of 34 knots or more, waterspouts, and 3/4" hail will prompt the issuance of Special Marine Warnings. Statements are issued for lesser criteria and sea fog.

Ocean Water Temperatures



Water temperatures can play a large role in wind speed and sea state forecasts, especially in northeast wind regimes and behind strong cold fronts.